

## Practice: solving equations with functions

1. If  $f[38] = 22$ , then there exists a knowable solution to the equation below.

$$y = 5 \cdot f[2x - 28] - 54$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

2. If  $f[98] = 74$ , then there exists a knowable solution to the equation below.

$$y = \frac{f[7(x - 6)]}{2} - 34$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

3. If  $f[62] = 14$ , then there exists a knowable solution to the equation below.

$$y = 9 \cdot f[2(x + 5)] - 76$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

4. If  $f[40] = 54$ , then there exists a knowable solution to the equation below.

$$y = \frac{f\left[\frac{x}{2} - 4\right]}{9} + 65$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

5. If  $f[33] = 11$ , then there exists a knowable solution to the equation below.

$$y = 4 \cdot \left( f\left[\frac{x + 52}{2}\right] + 3 \right)$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

6. If  $f[75] = 72$ , then there exists a knowable solution to the equation below.

$$y = \frac{f[3x - 27]}{18} + 22$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

7. If  $f[6] = 56$ , then there exists a knowable solution to the equation below.

$$y = \frac{f\left[\frac{x+81}{23}\right]}{4} - 9$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

8. If  $f[90] = 92$ , then there exists a knowable solution to the equation below.

$$y = \frac{f[6(x+7)] - 14}{26}$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

9. If  $f[25] = 17$ , then there exists a knowable solution to the equation below.

$$y = 3 \cdot f[2x+7] - 5$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

10. If  $f[85] = 48$ , then there exists a knowable solution to the equation below.

$$y = \frac{f[39x - 32]}{24} + 68$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

11. If  $f[78] = 72$ , then there exists a knowable solution to the equation below.

$$y = \frac{f[\frac{x}{8} + 73]}{24} + 74$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)

12. If  $f[33] = 24$ , then there exists a knowable solution to the equation below.

$$y = \frac{f[9x - 75]}{6} + 47$$

Find the solution. (The solution is the ordered pair  $(x, y)$  that makes the equation true.)